

PROGRAMS, PRACTICES, PEOPLE

Injury Surveillance Data Computerized by IHS, CDC

Although injuries are a leading cause of death and disability for all Americans, they are particularly devastating to American Indians and Alaska Natives (1). The Indian Health Service (IHS) and the Centers for Disease Control (CDC) have joined in an interagency agreement to develop better injury prevention and control programs for these populations. An essential component of this agreement is the development of a computerized surveillance system for the IHS injury prevention program.

Background

IHS's injury surveillance needs and capabilities were assessed in a pilot study conducted between January 1, 1987, and June 30, 1987, at three IHS Service Units (local health units) (2). Using emergency room logs and medical admission reports as data sources, IHS injury prevention personnel identified persons who died or were hospitalized as a result of injuries. At the conclusion of 6 months, the pilot surveillance data were compared with data available routinely from the IHS patient care system. This comparison revealed the optimal data sources for surveillance.

On the basis of this analysis, the following recommendations were made for developing local injury surveillance activities:

1. Use the existing IHS patient care record system to identify injury events;
2. Focus case investigations on injury problems important in the community;
3. Train field injury control personnel to perform epidemiologic analyses of certain injury problems; and
4. Implement uniform injury surveillance and quality control procedures throughout IHS.

A New Surveillance System

In response to the fourth recommendation, a computerized surveillance system was developed. Based on EPI INFO epidemiologic analysis software (an IBM PC-compatible, publicly available software program developed at CDC), the surveillance system provides an integrated series of epidemiologic programs designed for use in a local Service Unit. This system enables IHS injury preven-

tion personnel to create questionnaires, analyze data, and conduct other common epidemiologic tasks. An additional advantage of this system is that data collected in other computer systems can be imported and analyzed in the EPI INFO programs, which can be adapted to local needs without programming.

This computerized system will help implement a recently adopted IHS injury surveillance policy that states

1. Injury surveillance should be an ongoing, integral component of the injury prevention program; and
2. Injury surveillance will be conducted at the local level.

How the System Works

The system uses data from IHS hospital records as its base. Injury hospitalization records for 1981-88 have been transferred from the mainframe data base to microcomputer diskettes. To ensure timely case investigation in the future, IHS plans to provide injury prevention specialists at local Service Units with on-site access to the medical records of injured people via a new computerized patient-record system.

Patient, injury, and circumstance data are available from the existing patient record system. These data form a uniform core data set that can be linked with the data in a nationwide injury surveillance system. Before making recommendations for prevention programs, IHS injury prevention professionals can identify the underlying causes of injuries by using the International Classification of Disease's external cause of injury codes (E codes) for IHS patients hospitalized as a result of injuries (3,4)

To provide a basis for choosing appropriate injury prevention and control intervention for select injuries, IHS injury prevention personnel will conduct in-depth investigation of each of these select cases by using specifically designed questionnaires. Answers to these questionnaires will supplement the core information with information from other sources, such as police reports, emergency medical records, and direct interviews with the injured people.

Using this system, the IHS has developed the basis for a fully functional national injury surveillance system based on local surveillance units. This system will provide information for program planning, resource utilization, and program evaluation.

—LEWIS S. COLWELL, JR., *Environmental Consultant assigned by the Indian Health Service as liaison officer to the Division of Injury Epidemiology and Control, Center for Environmental Health and Injury Control, Centers for Disease Control; and SUZANNE M. SMITH, MD, Medical Epidemiologist in the Division of Injury Epidemiology, CDC.*

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New York Launches Alcohol Intervention Demonstration In 11 Hospitals Statewide

In recognition of the "alcohol connection" in a variety of medical conditions, the New York State Division of Alcoholism and Alcohol Abuse has instituted a Hospital Intervention Services (H.I.S.) Demonstration Program with 11 hospitals across the State.

H.I.S. provide for the active screening of all general hospital admissions, identifying and referring to treatment those patients whose alcohol abuse causes or contributes to their medical condition. The goal is to improve the quality and scope of the care that they receive and reduce health care utilization and cost.

A report developed by the Division of Epidemiology, issued to the Commissioner of Health in January 1989, indicate that alcohol abuse results in more than 1,300,000 days of hospital care and 762,000 emergency room visits in New York State each year. The cost of this hospital based health care alone is estimated to exceed \$500 million per year.

The division is determining how best to apply this model to the overall health-care system. After only 6 months of test operation at several project sites, the very preliminary results indicate that the H.I.S. model is effective. As of June 30,

1989, the fledgling projects have already identified 849 problem drinkers. The majority of these patients have accepted a referral to alcoholism treatment or to self-help groups, or both.

A Formative H.I.S. Report has been generated which reviews and analyzes the implementation experience and preliminary results. A more complete evaluation will be undertaken as all 11 projects are implemented and grow to a full operational level. The potential impact of H.I.S. on the health care system and utilization will be assessed.

A copy of the Formative H.I.S. Report and other material are available on request from

James N. Heckler, Healthcare Intervention Specialist, NYS Division of Alcoholism and Alcohol Abuse, 194 Washington Avenue, Albany, NY 12210; telephone (518) 473-7717.

Two Learning Disability Research Centers Created at Yale and Johns Hopkins

The National Institute of Child Health and Human Development (NICHD) has established the nation's first combined biomedical and behavioral science research centers on learning disabilities.

One of the new centers, headed by Dr. Bennett Shaywitz, will be at Yale University in New Haven, CT; the other, headed by Dr. Martha Bridge Denckla, will be located at the John Hopkins University in Baltimore. The Yale Center is funded at \$550,000, Johns Hopkins, \$950,000.

The centers were established on the recommendation of the Interagency Committee on Learning Disabilities which was created by the Health Research Extension Act of 1985 to review proposals on research programs and facilities for children's learning disabilities.

The U.S. Department of Education estimates that almost 5 percent of all school aged children in the country—about 1.9 million—receive special education services for learning disabilities. The Committee recommended that the Congress fund multidisciplinary research centers to study the causes, diagnosis, prevention, treatment, and improvement of these disabilities.

At the Hopkins Center, the plan is to use molecular genetics technology and magnetic resonance imaging to study the origins of learning disorders. Invest-

igators will focus on the psychological processes of brain development and the effects of education on these processes. Through the convergence of biomedicine and education, they hope to discover how and why children develop learning disabilities. Composed of Hopkins faculty members and investigators from the State University of New York at Albany, the program will include neurologists, psychiatrists, geneticists, statisticians, psychologists, special educators and communication specialists.

To gain a better understanding of Attention-Deficit-Hyperactivity-Disorder, investigators will study the visual, spatial and motor deficits in families with a history of known genetic defects.

There will be three projects at Yale: an examination of the different types of learning and attention disorders and their interrelationships; a look at attentional aspects of cognition; and a study of the distribution, types, and stability of reading, arithmetic and attention problems in a representative sample of 5-year-old children who will be followed for 2 years.

HHS Awards \$2.4 Million For Rare Disease Research

HHS Secretary Louis W. Sullivan, MD, has announced that 21 new grants have been awarded this year, providing \$2.4 million for development of "Orphan" products for 15 rare diseases, including autism, graft-versus-host disease, and neuroblastoma, a cancer that strikes children.

"Orphan" products include drugs, biologics, medical devices, and foods for medical purposes that may be useful in treating rare diseases and are not considered sufficiently profitable for manufacturers to invest in their commercial development.

One of the grants was awarded to Barbara Helen Herman, PhD, of the Children's Hospital National Medical Center in Washington, DC, to evaluate the usefulness and safety of using the drug naltrexone to treat autistic children. Naltrexone is approved under the trade name Trexan to block the effects of heroin in the treatment of recovering addicts.

Autism is a severe developmental disorder characterized by abnormal social relations and bizarre mannerisms, such as oddities of motor movement, speech patterns, and gestures. Currently, there

are no approved drug treatments for autism.

Another grant was awarded to Georgia B. Vogelsang, MD, of Johns Hopkins University School of Medicine in Baltimore. Dr. Vogelsang will be comparing standard therapy, using prednisone, and an experimental therapy, using thalidomide, in patients with chronic graft-versus-host disease.

Graft-versus-host disease frequently occurs after bone marrow transplants. This results in the rejection of the transplanted marrow.

A grant was also awarded for research using iodine I 125 meta-iodobenzylguanidine (MIBG) in the treatment of advanced neuroblastoma, a fatal cancer in children. For patients with advanced disease, standard chemotherapy has usually been unsuccessful. This grant was awarded to James C. Sisson, MD, of the University of Michigan in Ann Arbor.

The other 18 grants awarded are

- Erythropoietin for hemodialysis-associated porphyria, to Karl E. Anderson, MD, The University of Texas Medical Branch at Galveston.
- GnRH analogues—final height in precocious puberty, to Paul A. Boepple, MD, Massachusetts General Hospital, Boston.
- Short-chain fatty acid therapy for ulcerative colitis, to Richard I. Breuer, MD, Evanston Hospital Corporation, Evanston, IL.
- Maintenance therapy of Wilson's Disease with zinc, to George J. Brewer, MD, University of Michigan, Ann Arbor. Wilson's Disease is a condition in which copper accumulates abnormally in the liver, kidneys and brain.
- Therapy of Wilson's Disease with tetrathiomolybdate, to George J. Brewer, MD, University of Michigan, Ann Arbor.
- Urea cycle enzymopathies—phase III studies of Phenylbutyric acid, to Saul W. Brusilow, MD, Johns Hopkins University, Baltimore.
- New peritoneovenous shunt for treatment of ascites, to Henry Buchwald, MD, PhD, University of Minnesota, Minneapolis.
- Low dose ethinyl estradiol for gonadal failure, to Robert E. Dudley, PhD, Gynex, Inc., Deerfield, IL.
- Rifampin-ethambutol-ciprofloxacin treatment for M. Avium complex, to Mark Andrew Jacobson, MD, University of California, San Francisco.
- 4-methylpyrazole—methanol-ethylene glycol antidote study, to Kenneth E. McMartin, PhD, Louisiana State University Medical Center, Shreveport.

- Clinical studies of coagulation Factor X, to Shirley I. Miekka, PhD, American Red Cross, Rockville, MD.
- Intrathecal baclofen for severe spasticity, to Richard D. Penn, MD, Rush-Prebyterian-St. Luke's Medical Center, Chicago.
- Clinical trial of zinc in sickle cell anemia, Ananda S. Prasad, MD, PhD, Wayne State University, Detroit.
- Safety and effectiveness of DMSA in therapy of lead poisoning, to J. Julian Chisolm Jr., MD, The Kennedy Institute for Handicapped Children, Inc., Baltimore.
- Photofrin II photodynamic therapy of severe psoriasis, to Gerald D. Weinstein, MD, University of California, Irvine.
- Betaine in the treatment of homocystinuria, to William G. Wilson, MD, University of Virginia, Charlottesville.
- 195mPt-Cisplatin—drug monitoring, effectiveness—safety, to Walter Wolf, PhD, Professional Staff Association, Los Angeles.
- Clinical trial of an anti-GD2 Mab in neuroblastoma, to Alice L. Yu, MD, PhD, The Regents of the University of California, La Jolla.

Pesticide Residues in U.S. Food Minimal, FDA Says

The Food and Drug Administration (FDA) reports that it is finding fewer pesticide residues in the foods Americans buy and eat, and most of those that are found are at very low levels.

The public, according to polls, is more concerned about pesticides than any other potential food problem. FDA has increased its pesticide testing of foods 25 percent. But its latest compilation shows its tests found no pesticide residues in nearly two-thirds—61 percent—of raw foods sold in the United States in 1988. That compares to 57 percent the previous year.

Tests of more than 96 percent of the fruits, vegetables, grains, dairy, and other products analyzed showed no residues at all or showed levels well within what is legally permitted, according to the agency's newest annual pesticide monitoring report. Even the offending 4 percent were often caught on technical violations. For example, a registered pesticide may have been used within the tolerance for other crops but on a crop it had not been approved for.

Less than 1 percent of the domestic and imported samples were found above the tolerances set by the Environ-

mental Protection Agency, which approves pesticides used in the United States.

The tests were made on fresh produce and other raw commodities intended for eventual human or animal consumption. Residues usually decrease further during storage, processing, washing, and cooking.

Separately, FDA also monitors table-ready foods for pesticide residues and other contaminants that may be present after the foods are cleaned and cooked for eating. Foods typical of what Americans eat are purchased by FDA at supermarkets, prepared as one would at home, and then analyzed. The most recent Total Diet Study, as in 1987 and previous years, showed the intakes to be less than 1 percent of the Acceptable Daily Intakes established for most of the pesticides measured.

Copies of "Residues in Food—1988" can be obtained by writing Norma J. Yess, FDA Division of Contaminants Chemistry, HFF-420, 200 C. St. SW, Washington, DC 20204. The report details FDA findings for all samples analyzed during the 1988 fiscal year, ending Sept. 30, 1988, and discusses FDA's various pesticide monitoring activities.

ADAMHA Awards Record Total of Alcohol and Drug Grants

The Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) has awarded 96 grants totaling \$22 million to help communities and organizations develop and implement grass-roots programs for the prevention and early intervention of alcohol and other drug problems. The awards are being administered by the Office for Substance Abuse Prevention, ADAMHA, Public Health Service.

"This is the largest number of grants we've ever awarded simultaneously for alcohol and other drug abuse prevention and early intervention activities," Health and Human Services Secretary Louis W. Sullivan, MD, said.

Of the 96 grants awarded, 30, averaging \$208,000 each, are for model programs targeting high-risk young people. They include abused or neglected youth, latchkey, disabled, or delinquent youth, pregnant teens, children of abusers of alcohol and other drugs and others.

One such project incorporates the

efforts of five organizations to reach 3,000 District of Columbia youth who are using alcohol or other drugs and have at least one other risk factor (suicide attempt, depression, violent behavior, and so on). In another program, Korean and Filipino community groups in Los Angeles County are working together to provide drug-free activities, peer support groups, family counseling, and community education seminars to high-risk Asian Pacific youth and new immigrants.

Twenty demonstration programs, averaging \$233,000 each, focus on preventing alcohol and other drug use in pregnant and postpartum women and their infants. The Maternal and Child Health Division of the Health Resources and Services Administration contributed \$450,000 to this program.

One program in Oregon coordinates currently fragmented services of prenatal care, treatment for alcohol and other drug abuse, and postnatal care to 100 imprisoned women and their infants in Portland. Another program provides treatment services for alcohol and other drug addiction and perinatal care to 960 low income, pregnant women in New York City over 3 years.

As part of the total of 96 grants awarded, 23 States received Community Youth Activity grants, averaging \$458,000 each. These grants enable States to assist community services and partnerships that offer alcohol and other drug abuse prevention to youth through education, training, and recreation activities.

In one such project on Hawaii, a partnership of social, educational, and community groups seeks to foster a drug-free environment, strengthen community services, and encourage intergenerational involvement. In a Rhode Island project, a consortium of seven organizations offers a multifaceted prevention program for Hispanic youth; it encompasses peer leadership training, vocational training and placement, counseling, and education about alcohol and other drugs.

Another 23 grants provide support for conferences promoting the exchange and dissemination of information to prevent alcohol and other drug problems. The conference grants averaged \$40,000 each.

New grant applications in these three categories (except the community youth activities grants, which were one-time grants only) can be submitted by April 15, 1990.

For more information on the Fiscal Year 1990 grant announcements, con-

tact the National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20853; phone (301) 468-2600.

For details about the High-Risk Youth and Pregnant and Postpartum Women grants, call Bernard McColgan, OSAP, at (301) 443-4564; for information about the Community Youth Activities grants, call David Robbins, OSAP, (301) 443-0369, and for information on the Conference grants call Kent Augustson, OSAP (301) 443-6980.

Agency for Health Care Policy and Research Established

The eighth and newest agency of the Public Health Service is the Agency for Health Care Policy and Research (AHCPR), established when President George Bush signed the Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239) on December 19, 1989. AHCPR is the Federal Government's focal point for health services research, building on and expanding the responsibilities of its predecessor, the National Center for Health Services Research and Health Care Technology Assessment (NCHSR).

AHCPR's purpose is to enhance the quality, appropriateness, and effectiveness of health care services and to improve access to services. To do so, AHCPR will establish a broad base of scientific research and promote improvements in clinical practice and in the organization, financing, and delivery of health care services.

The Agency will conduct and support research, demonstration projects, evaluations, and training; facilitate guideline development; and disseminate information on a wide range of activities. These include the effectiveness, efficiency, and quality of health care services; outcomes of health care services and procedures; clinical practice; health care technologies, facilities, and equipment; health promotion and disease prevention; health statistics and liability and epidemiology; and medical liability.

MEDTEP

A major undertaking of the new Agency is the Medical Treatment Effectiveness Program (MEDTEP), which focuses on improving the effectiveness and appropriateness of health care services by enhancing the medical community's understanding of what health care practices are most effective and

what works best. Among the central questions of the program will be whether the patient's functional status has improved and according to whose viewpoint. Four sets of activities form the basis of MEDTEP's agenda to improve the scientific basis of medical decision making.

Collection and development of data. As it expands the data bases available for analysis, this program will improve the ability to link Medicare files and other data bases on additional populations.

Research on patient outcomes and clinical effectiveness. Specific treatment will be assessed through studies such as small area analysis and multidisciplinary epidemiologic research. In fiscal year 1989, NCHSR awarded four major grants that will support research teams to assess alternative management of myocardial infarction, different procedures for treatment of cataracts, management of prostatic hyperplasia, and nonsurgical interventions for low back pain. Also awarded were planning grants for potential major team assessments in areas that include total hip replacement, colon polyps, peripheral vascular disease, and ischemic heart disease.

Dissemination and assimilation of findings. As patient outcomes research is completed, results will be widely disseminated through journals, information networks, and conferences sponsored by AHCPR and the Health Care Financing Administration. The resources of the National Institutes of Health (including the National Library of Medicine) and the Health Resources and Services Administration (HRSA) will be used. HRSA's Bureau of Health Professions will convey appropriate information to geriatric education centers, family medicine departments, general internal medicine departments, and the network of area health education centers. AHCPR will explore new approaches to medical education to ensure that research findings are incorporated in academic curriculums, continuing education, and other professional education programs.

Guidelines. The fourth and most challenging component of MEDTEP is practice guidelines, parameters, and standards of care. Using the research findings of MEDTEP and similar outcomes research of other institutions, AHCPR will facilitate development of practice guidelines. To be created by

practicing physicians, the guidelines will be based on science and be practical, explicit, and subject to revisions as needed.

This process is expected to involve the full participation of professional organizations such as the American Medical Association, specialty organizations such as the American College of Physicians, and scientific bodies such as the Institute of Medicine. Also participating will be academic medical centers, standards-setting organizations such as the Joint Commission on Accreditation of Healthcare Organizations, quality measurement organizations such as physician review organizations, and research-based organizations such as the American Medical Review Research Center.

Other Research

Other research priorities for the new Agency include improved information on health care expenditures, rural and minority health issues, and research on medical malpractice. AHCPR will continue to conduct general health services research and to assess technologies being considered for coverage by federal funded health programs.

J. Jarrett Clinton, MD, is Acting Administrator of the Agency.

—WILLIAM LEEVEE, *Writer-Editor, Agency for Health Care Policy and Research*

HHS Releases Special Report on Alcoholism and Health

The "Seventh Special Report to the U.S. Congress on Alcohol and Health" by the Department of Health and Human Services (HHS) describes scientific advances in understanding the health consequences of alcohol, the nation's number one drug of abuse.

"Using the latest computer-aided imaging technologies such as CAT, PET, and MRI, and other advanced research techniques, alcohol researchers have recently made promising headway toward determining factors to the disease of alcoholism and its consequences," HHS Secretary Louis W. Sullivan, MD, said in releasing the report.

"We are now optimistic, for instance, that the genetic and environmental factors that define individual vulnerability to alcoholism can be identified," he added.

"Doing so would provide health care professionals and others with powerful tools for preventing and treating alcohol abuse and alcoholism."

The new report—the seventh in a triennial series—encompasses state-of-the-art knowledge from all areas of research on alcohol-related problems, including epidemiology, genetics, neurosciences, medical consequences of alcohol abuse and alcoholism, alcohol use and pregnancy, adverse social consequences, diagnostic criteria and screening instruments, prevention, early intervention, and treatment.

Among research findings included in the report are

- Although U.S. per capita consumption of alcohol is at its lowest level since 1970, alcohol is used by more Americans than any other drug, including cigarette tobacco.
- An estimated 10.5 million U.S. adults exhibit some symptoms of alcoholism; and additional 7.2 million abuse alcohol but do not show symptoms of dependence.
- Despite a downward trend in alcohol use by high school seniors during the 1980s, they still use alcohol at disturbingly high rates: In 1988, 92 percent had tried alcohol, nearly two-thirds were current drinkers, and more than one-third were occasional heavy drinkers.
- Nearly one-half of all deaths from motor vehicle crashes are alcohol related. It has been estimated that the risk of a fatal crash per mile driven is at least eight times higher for a drunk driver than for a sober one.
- It is estimated that 25 percent of all hospitalized persons have alcohol-related problems.
- The economic cost of alcohol abuse and dependence was estimated to be \$116.9 billion in 1983, \$136.3 billion in 1990.
- Untreated alcoholics and their families have higher general health care costs than nonalcoholics and their families, but these costs tend to decrease following alcoholism treatment.
- Research on the molecular and cellular bases for alcohol's actions on the brain has revealed that levels of alcohol which typify common human consumption affect specific proteins involved in brain function.
- Fetal exposure to alcohol is one of the leading known causes of mental retardation in the Western world; treatment costs associated with such exposure total nearly one-third of a billion dollars annually.

- The deleterious consequences to offspring of maternal drinking during pregnancy are long-lasting. Although a follow-up study of fetal alcohol syndrome cases showed some improvement, learning deficiencies persisted.
- Research has shown that striking reductions in fatal traffic accidents involving drinking drivers occurred among 16- to 20-year-olds in States that increased their minimum drinking age to 21.
- Differences in responses to alcoholism treatment based on variations in patient characteristics have led to increased interest in patient-treatment matching.

Copies of the "Seventh Special Report on Alcohol and Health" may be obtained from the National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20852.

NTS Will Teach Health Professionals About Alcohol and Other Drug Problems

The Office of Substance Abuse Prevention (OSAP) is launching a 3-year, \$8.1 million National Training System to train health professionals and community leaders in the diagnosis, referral, treatment, rehabilitation, and prevention of alcohol and other drug problems.

OSAP, part of the Public Health Service, will identify and provide continuing education programs and develop curriculums where none currently exist for physicians, nurses, counselors, social workers, psychologists, and school counselors dealing with alcohol and other drug problems. The National Training System will also develop training programs for community leaders who need to develop their own community prevention and intervention programs, and for State agency planners and trainers in need of state-of-the-art prevention technologies.

"Most of the doctors, nurses, and counselors practicing today were not given specific training in school to deal with clients with alcohol and other drug problems," said Health and Human Services Secretary Louis W. Sullivan, MD. "Our National Training System will help to fill this void and provide the continuing education that they need to deal with these problems."

In addition to the National Training System, the OSAP is launching a Training Resources Identification and Need

Assessment Project that will provide a complete computerized data base of all curriculums, other training resources, and names of educators experienced in training professionals in the field of alcohol and other drug abuse. This data base will identify resource "voids," subject areas in which training resources are lacking, either nationally or in a specific region.

OSAP will develop the National Training System through a contract with MACRO Systems, Inc., of Silver Spring, MD, and its subcontractor, the National Association of State Alcohol and Drug Abuse Directors. It will be operational by the summer of 1990. OSAP is establishing the data base through a contract which Horizons Technology, Inc. of Fairfax, VA, to be completed by next summer also. Both projects are being administered by OSAP's Division of Prevention Implementation.

For more information on the National Training System, contact Jo Brady, tel. 301-443-5276.